

Comparisons of Job Characteristics

Focus Occupation: [Maintenance and Repair Workers, General \(49-9042\)](#)

Associated Occupation: [Aircraft Mechanics and Service Technicians \(49-3011\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Maintenance and Repair Workers, General (49-9042)

Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	22.8	19.3	<<	Extensive education and/or training may be required
Design	5.2	13.5	11.7	<	Expanded education and/or training may be required
Engineering and Technology	5.7	12.3	10.3	<	Expanded education and/or training may be required
Physics	4.3	10.9	8.8	<	Expanded education and/or training may be required
Chemistry	4.8	10.6	7.6	<<	Extensive education and/or training may be required
Transportation	4.6	9.8	5.0	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Maintenance and Repair Workers, General (49-9042)

Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Equipment Maintenance	3.5	17.2	12.7	<<	Extensive development of skills in this area may be required
Repairing	3.4	15.9	12.3	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	13.9	10.0	<<	Extensive development of skills in this area may be required

Operation Monitoring	6.6	13.5	8.4	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	12.8	9.8	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	9.1	9.5	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 84			
Focus Occupation: Maintenance and Repair Workers, General (49-9042) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Finger Dexterity	7.6	14.8	9.4	<<	Extensive improvement in abilities may be required
Control Precision	6.6	14.4	9.5	<<	Extensive improvement in abilities may be required
Problem Sensitivity	11.1	14.4	12.7	<	Some improvement in abilities may be required
Manual Dexterity	6.5	13.9	11.4	<	Some improvement in abilities may be required
Information Ordering	9.9	12.8	13.3	0	Current ability level may be sufficient
Arm-Hand Steadiness	6.8	12.2	10.1	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	11.1	8.3	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	10.7	5.8	<<	Extensive improvement in abilities may be required
Visual Color Discrimination	6.4	10.7	8.5	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 81
Focus Occupation: Maintenance and Repair Workers, General (49-9042) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Adjust or set mechanical controls or components	69	
Align or adjust clearances of mechanical components or parts	72	
Apply cleaning solvents	41	
Assemble, dismantle, or reassemble equipment or machinery	70	
Build or repair structures in construction, repair, or manufacturing setting	54	

Climb ladders, scaffolding, or utility or telephone poles	56
Conduct tests to locate mechanical system malfunction	71
Determine installation, service, or repair needed	58
Diagnose mechanical problems in machinery or equipment	65
Erect scaffold	56
Fabricate sheet metal parts or items	80
Fabricate, assemble, or disassemble manufactured products by hand	11
Identify properties of metals for repair or fabrication activities	71
Inspect machinery or equipment to determine adjustments or repairs needed	42
Lubricate machinery, equipment, or parts	59
Maintain welding machines or equipment	70
Move or fit heavy objects	8
Observe or listen to machinery or equipment operation to detect malfunctions	81
Operate hoist, winch, or hydraulic boom	34
Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read schematics	34
Read specifications	23
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Repair or replace malfunctioning or worn mechanical components	62
Set up and operate variety of machine tools	62
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test mechanical products or equipment	56
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use knowledge of metric system	39
Use knowledge of welding filler rod types	75
Use machine tools in installation, maintenance, or repair	72
Use precision measuring devices in mechanical repair work	61
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

**Similarity of Focus
Occupation to Associated
Occupation: 84**

Focus Occupation: Maintenance and Repair Workers, General (49-9042)
Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Tools and Technologies	Exclusivity
Business function specific software	1
Compressors	9
Computers	1
Cutting and crimping and punching tools	3
Electrical measuring and testing equipment	7
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Industrial trucks	10
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Paint applicators and painting accessories	15
Pneumatic tools	8
Power tools	2
Respiratory protection	6
Rough and finishing tools	5
Sealing tools	21
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Tool attachments and accessories	12
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.